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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,418	02/05/2004	Henrik S. Olsen	PF363C2	4060

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EXAMINER	
BELYAVSKYI, MICHAIL A	

ART UNIT	PAPER NUMBER
1644	

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/771,418	OLSEN ET AL.	
	Examiner	Art Unit	
	Michail A Belyavskyi	1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,19,21 and 23-82* is/are pending in the application.

4a) Of the above claim(s) *1, 19, 37-39, 54- 56, 67-69, 80-82* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *21, 23-36 and 40-53, 57-66, 70-79* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 19, 21, 23-82 are pending.

2 . Applicant's election with traverse of Group III, Claim 21, now claims 21, 23-36 and 40-53, 57-66, 70-79 in Response to Restriction Requirement filed on 08/14/04 is acknowledged. Applicant traverse the Restriction Requirement on the grounds that the inventions must be both independent and distinct and an undue search burden on the examiner. However, MPEP 803 states that the Inventions be either independent or distinct and a burden on the Examiner if restriction is required.
Regarding applicant's comments about undue burden, the MPEP 803 (August 2001) states that "For purposes of the initial requirement, a serious burden on the examiner may be prima facie shown if the examiner shows by appropriate explanation either separate classification, separate status in the art, or a different field of search". The Restriction Requirement enunciated in the previous Office Action meets this criteria and therefore establishes that serious burden is placed on the examiner by the the examination of more than one Group The Inventions are distinct for reasons elaborated in paragraphs 2-6 of the previous Office Action.

The requirement is still deemed proper and is therefore made FINAL.

Upon further consideration, the prior art search was extended to include all antibody species that specifically binds to an RcR-V polypeptide of claim 19. The species election is hereby withdrawn.

3. Claims 1, 19, 37-39, 54- 56, 67-69, 80-82 are withdrawn from further consideration by the Examiner, 37 C.F.R. § 1.142(b) as being drawn to nonelected inventions.

Claims 21, 23-36 and 40-53, 57-66, 70-79 reads on an isolated antibody that specifically binds to an FcR-V polypeptide of claims 19, 23 , 40, 57 and 70 are under consideration in the instant application.

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention *to which the claims are directed.*

5. Applicant's IDS, filed 08/16/04 notes that an IDS was submitted with the prior application 09/907,421. However these citations have been crossed out as said references cited in said parent application cannot be found. Applicant is invited to resubmit such references to complete the instant file. The examiner apologizes for any inconvenience to applicant for having to resubmit such documents.

6. Claim 21 is objected to because said claim dependent upon non-elected claim 19.

7. 35 U.S.C. § 101 reads as follows:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

8. Claims 21, 23-36 and 40-53, 57-66, 70-79 are rejected under 35 U.S.C. 101 as the claimed invention is not supported by either a specific and substantial asserted utility or a well-established utility.

Applicant is directed to the Revised Interim Utility Guidelines, Federal Register, Vol. 64, No. 244, pages 71427-71440, Tuesday December 21, 1999. In keeping with the revised utility guidelines and corresponding training materials (available on the PTO Website), none of the disclosed uses is a specific, and/or substantial use.

The specification disclosed a purified polypeptide of SEQ ID NO: 10 encoding a novel protein FcR-V (see page 4, paragraph 0012 and page 16, paragraph 0032 in particular). The specification fails to provide sufficient objective evidence of any activity for encoded protein. Applicant only states that said protein shows sequence homology with many FcRs and KIRs , for example about 55.5 % similarity with bovine Fc-γ2 receptor. The Specification further disclosed that FcR-V may be involved in regulation of the immune and hematopoietic systems . (see overlapping pages 4-5, paragraph 0012 and page 18, paragraph 0037 in particular). Based upon homology to related molecules the specification disclosed that said protein may play a role in one or more aspects of regulating the immune system and tumor cell biology (page 58 , paragraph 0131 in particular). It is also said that novel FcR-V protein is broadly expressed in various cells and tissues (page 13, paragraph 0024 in particular). The specification also disclosed that antibody that specifically recognized polypeptide of SEQ ID:10 are useful to provide immunological probe for differential identification of the tissue or cell type or for

treating various diseases (see page 14, paragraph 0025 and page 68, paragraph 0162 in particular).

There is no information pertaining to the significance of the percentage homology, e.g. whether there were any conserved motifs that would led the artisan to accept the protein's function. Moreover, neither the specification nor the prior art disclose any information regarding the evolutionary significance of this homology or relative conservation of structure and function across species. For example, there is no evidence of record showing why homology to a bovine Fc-γ2 receptor would provide a better basis for assigning protein function than homology to a primate species. It is noted that homology search analysis shows that polypeptide of SEQ ID NO:10 shows 63 % amino acid sequence homology to human gp49 polypeptide or 63 % homology to LIR polypeptide or 50 % homology to murine regulation protein p91 (see attached sequence search analysis). Identifying a protein as having a limited homology to said proteins does not indicate what function it might have. No well-established utility for a FcR-V protein encoded by SEQ ID NO:10 is indicated. After further research, specific and substantial utility might be found for claimed polypeptide of SEQ ID NO:10 and antibody, that specifically recognized said polypeptide. This further characterization, however is part of the act of invention and until it has been undertaken, Applicant's claimed invention is incomplete. A well-established utility is a specific, substantial, and utility that is well known, immediately apparent, or implied by the specification's disclosure of the properties of a material.

In support, Skolnick et al. (Trends in Biotech., 18(1):34-39, 2000) disclose that the skilled artisan is well aware that assigning functional activities for any particular protein or protein family based upon sequence homology is inaccurate, in part because of the multifunctional nature of proteins (e.g., "Abstract" and "Sequence-based approaches to function prediction", page 34). Even in situations where there is some confidence of a similar overall structure between two proteins, only experimental research can confirm the artisan's best guess as to the function of the structurally related protein (see in particular "Abstract" and Box 2). Attwood *et al.* (Science, 2000, 290, 471-473) teach that protein function is context-dependent and the state of the art of making functional assignments merely on the basis of some degree of similarity between sequences and the current structure prediction methods is unreliable. Given the above information, and in light of the art recognized fact that minor sequence differences can significantly affect a protein's function, one skilled in the art would find it more likely than not that SEQ ID NO:10 is not human Fc-γ2. Thus, the homology-based assignment FcR-V as human Fc-γ2 receptor does not appear to provide evidence of a specific and substantial utility based on the knowledge of the skilled artisan and the data presented in the instant specification.

There is no specific disease or specific function that is suggested by this limited homology. There is therefore no specific or substantial utility that is well-known, apparent, or implied by the relationship of the instant FcR-V polypeptide , encoded by SEQ ID NO:10 to a member of human Fc-γ2.

A utility such as chromosome localization would apply to virtually every naturally occurring polynucleotide and is therefore not specific. Likewise, tissue-specific or cell –specific

expression does not rely on specific properties or functions of the encoded protein. Each polypeptide encoded by specific amino acid sequence is expressed within a multicellular organism in some cell type and this expression is regulated in either a temporal or spatial manner. That, is, each expressed sequence is expressed in some cell type at some point in a hosts lifetime. Some polypeptide are expressed embryonically, others are expressed only in particular cells, while still others are expressed in a wide variety of cells. In addition, some polypeptide which are expressed in particular cells are only expressed in response to certain metabolic or environmental stimuli. Therefore, mere expression does not appear to provide evidence of a specific and substantial utility based on the knowledge of the skilled artisan and the data presented in the instant specification.

Further, the specification does not disclose any diseases or conditions known to be associated with the FcR-V polypeptide , encoded by SEQ ID NO:10 or any conditions associated with altered levels (increase or decrese) of said polypeptide. Since any protein or antibody to said protein may potentially be used as a treatment agent, this utility would not be considered to be specific. Since no particular disease or condition is disclosed, the artisan would have been required to perform additional experimentation to identify and/or reasonably confirm the asserted use of FcR-V polypeptide or antibody to said polypeptide as a treatment agent and therefore, this utility would not be considered to be substantial. Therefore, identification of antibody that binds specifically to FcR-V polypeptide would not be sufficient to identify or confirm a "real world" context of use; clearly further research would be required to identify a disease in which the encoded protein is involved that can be treated using said antibody .

The instant claims are drawn to an antibody that specifically recognized FcR-V polypeptide of as yet undetermined function or biological significance. There is no evidence of record or any line of reasoning that would support the conclusion that FcR-V polypeptide of the instant application or antibody that specifically recognized said polypeptide was, as of the filling date, useful for therapeutic and diagnostic application, as stated on page 58, paragraph 0131 or for treatment , as stated on page 68, paragraph 0162. Until some actual and specific significance can be attributed to the polypeptide identified in the specification as FcR-V polypeptide, one of the ordinary skill in the art would be required to perform additional experimentation in order to determine how to use the claimed invention. Thus, there was no immediately apparent or "real world" utility as of the filing date.

Thus, the disclosed utilities do not appear to be either specific or substantial because the specification fails to disclose a specific and substantial utility for a polypeptide of SEQ ID NO:10. Therefore it appear that a polypeptide of SEQ ID NO:10 and antibody that binds specifically to said polypeptide constitute research reagents for further experimentation to discover a "real world " utility for the claimed invention.

Thus, for the above mentioned reasons there does not appear to be either a specific and substantial asserted utility, or a well-established utility for the claimed : an isolated antibody that binds specifically to an Fc RV-polypeptide of Claims 19, 23 , 40, 57 and 70 .

In addition, since an FCR-V -polypeptide of Claims 19, 23 , 40, 57 and 70 and antibody to said polypeptide appears to constitute a research reagent, an isolated cells and hybridoma that

produces said antibody also do not appear to have a specific and substantial utility, or a well established utility.

Applicant is directed to the Utility Examination Guidelines, Federal Register, Vol. 66, No. 4, pages 1092-1099, Friday January 5, 2001.

As such, further research would be required. See Brenner v. Manson, 383 U.S. 519, 535-36, 148 USPQ 689, 696 (1966), the court indicates "a patent is not a hunting license. It is not a reward for the search, but compensation for its successful conclusion." A patent is therefore not a license to experiment. Because the claimed invention is not supported by a specific asserted utility for the reasons set forth, credibility of any utility cannot be assessed. The basic quid pro quo of the patent system, as interpreted by the Brenner Court, is the grant of a valuable legal right in exchange for a meaningful disclosure of the claimed invention. Appelant's bare-bones disclosure in this case dose not entitle them to the legal right they claim.

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:
The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 21, 23-36 and 40-53, 57-66, 70-79 also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a specific and substantial, asserted utility or a well established utility for the reasons set forth in the rejection under 35 USC101 above, one skilled in the art clearly would not know how to use the claimed invention.

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:
The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 57-66 and 70-79 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. **This is a New Matter rejection.**

"An isolated antibody or fragment thereof that specifically binds a FcR-V protein expressed on the surface of a cell" claimed in claims 57-66 and 70-79 represent a departure from the specification and the claims as originally filed and applicant has not pointed out where the

support come from. The specification and the claims as originally field only support an isolated antibody, that binds specifically to an FcR-V polypeptide recited in Claims 19, 23 and 40.

13. Claims 21, 40-53 and 70-79 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention.

It is apparent that FcR- V cDNA clone is required to practice the claimed invention in claims 21, 40-53 and 70-79. As required elements, they must be known and readily available to the public or obtainable by a repeatable method set forth in the specification. If they are not so obtainable or available, the enablement requirements of 35 U.S.C. 112, first paragraph, may be satisfied by a deposit of said cDNA clone. See 37 CFR 1.801-1.809.

It is noted in the specification on page 4, paragraph 0011, indicated that FcR-V clone has been deposit with ATCC.

If the deposit have been made under the terms of the Budapest treaty, an affidavit or declaration by applicants or someone associated with the patent owner who is in a position to make such assurances, or a statement by an attorney of record over his or her signature, stating that the FcR-V cDNA has been deposited under the Budapest Treaty and that said clone will be irrevocably and without restriction or condition released to the public upon the issuance of a patent would satisfy the deposit requirement made herein. See 37 CFR 1.808. Further, the record must be clear that the deposit will be maintained in a public depository for a period of 30 years after the date of deposit or 5 years after the last request for a sample or for the enforceable life of the patent whichever is longer. See 37 CFR 1.806 1.808 (a)(2) and MPEP 2410-2410.01.

If the deposit has not been made under the Budapest treaty, then an affidevit or declaration by Applicants or someone associated with the patent owner who is in position to make such assurances, or statement by an attorney of record over his or her signature, stating that the deposit has been made at an acceptable depository and that the criteria set forth in 37 CFR 1.801-1.809, have been met

Amendment of the specification to disclose the date of the deposit and complete name and address of the depository is required

14. Also an issue is that the specification does not reasonably provide enablement for: (i) an isolated antibody, that binds specifically to an FcR-V polypeptide that is 95 % identical to a sequences of SEQ ID NO:10, as recited in claim 21 . The specification does not enable any

person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

The specification does not enable one of skill in the art to practice the invention as claimed without undue experimentation.

The claims as written encompass the genus of antibodies that can specifically bind polypeptides wherein such polypeptides have numerous differences in amino acid sequences (95 % identical to a sequences selected from the group recited in claim 19)

Factors to be considered in determining whether undue experimentation is required to practice the claimed invention are summarized *In re Wands* (858 F2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988)). The factors most relevant to this rejection are the scope of the claim, the amount of direction or guidance provided, the limited working examples, the unpredictability in the art and the amount of experimentation required to enable one of skill in the art to practice the claimed invention.

There is insufficient guidance and direction as to how to make and use an antibody that can specifically binds to *any* FcR-II polypeptide of claim 19.

Claims 21, 23-36 and 40-53, 57-66, 70-79 requires antibody to bind to different polypeptides. However, the present specification fails to provide sufficient disclosure of *any* FcR-II polypeptide that is 95% identical to a amino acid sequences selected from the group recited in Claim 19 that maintain the structural and functional properties of the FcR-V polypeptide, encoding by SEQ ID NO:10. The specification disclosed only FcR-V polypeptide, encoded by an amino acid sequences selected from the group recited in Claims 23 , 40, 57 and 70 and an isolated antibody that specifically binds to said polypeptide. The common attributes of the FcR-V polypeptide are not described. The specification does not provide sufficient guidance as to which of the amino acids may be changed while FcR-V functional is retained.

The current state of the art in epitope structure prediction is limited given the noncontiguous amino acid residues constitute most epitopes, and that the dynamics of binding is often not integrated into the epitope prediction equation, making epitope structure prediction a complex four-dimensional problem (see Van Regenmortel, page 464, abstract in particular; Methods: A Companion to Methods of Enzymology 9:465-472, 1996). Van Regenmortel notes that 90% of antibodies raised against intact proteins do not react with any peptide fragment derived from the parent protein indicating that these antibodies are directed to discontinuous epitopes (see page 466, column 1 in particular). In addition Van Regenmortel states that the low success rate of antigenic prediction is due to the fact that predictions concern only continuous epitopes and it is unrealistic to reduce the complexity of epitopes that always possess conformational features to

one-dimensional, liner peptide models (see page 467, column 2 in particular). Detailed information regarding the specific epitopes recognized by the instant antibodies to an FcR-V polypeptide of claim 19 is lacking. A skilled artisan would require guidance, such as information regarding the specific epitope recognition of the antibodies successfully used in the instant invention in order to make an antibodies other than those directed against FcR-V polypeptide, encoded by an amino acid sequences selected from the group recited in Claim 19 in a manner reasonably commensurate with the scope of the claims. Thus, it would require undue experimentation of one skilled in the art to practice the claimed invention.

Colman *et al.*, in Research in Immunology (145(1):33-36, 1994) teach single amino acid changes in an antigen can effectively abolish antibody antigen binding. Abaza *et al.*, in Journal of Protein Chemistry (11(5):433-444, 1992) teach that single amino acid substitutions outside the antigenic site on a protein effect antibody binding. Further, Lederman *et al* in Molecular Immunology (28:1171-1181, 1991) disclose that a single amino acid substitution in a common allele ablates binding of a monoclonal antibody (see entire document).

Thus, Applicant has not provided sufficient guidance to enable one skill in the art to make claimed: (i) an isolated antibody, recited in claim 21, that binds specifically to an FcR-V polypeptide of claim 19 in manner reasonably correlated with the scope of the claims. The scope of the claims must bear a reasonable correlation with the scope of enablement. *In re Fisher*, 166 USPQ 18(CCPA 1970) indicates that the more unpredictable an area is, the more specific enablement is necessary in order to satisfy the statute.

In view of the quantity of experimentation necessary, the unpredictability of the art, the lack of sufficient guidance in the specification, the limited working examples, and the limited amount of direction provided given the breadth of the claims, it would take undue trials and errors to practice the claimed invention.

15 . Claim 21 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant in possession of : an isolated antibody that binds specifically to an FcR-II polypeptide encoded by an amino acid sequences selected from the group recited in Claims 23 , 40, 57 and 70.

Applicant is not in possession of : (i) an isolated antibody, that binds specifically to an FcR-V polypeptide that is 95 % identical to an amino acid sequences selected from the group recited in Claim 19, as recited in claim 21;

Applicant has disclosed a limited number of species of antibody that specifically binds to an FcR-V polypeptide; therefore, the skilled artisan cannot envision all the contemplated amino acid sequence possibilities recited in the instant claims. Consequently, conception in either case cannot be achieved until a representative description of the structural and functional properties of the claimed invention has occurred, regardless of the complexity or simplicity of the method. Adequate written description requires more than a mere statement that it is part of the invention. The sequences themselves are required. See Fiers v. Revel, 25 USPQ2d 1601, 1606 (CAFC 1993).

A description of a genus of antibody that specifically binds to an FcR-II polypeptide sequences may be achieved by means of a recitation of a representative number of polypeptide sequences, defined by amino acid sequence, falling within the scope of the genus, or of a recitation of structural features common to the genus, which features constitute a substantial portion of the genus. Regents of the University of California v. Eli Lilly&Co., 119F3d 1559, 1569, 43 USPQ2d 1398, 1406 (Fed. Cir. 1997).

Vas-Cath Inc. v. Mahurkar, 19 USPQ2d 1111, makes clear that "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purposes of the written description inquiry, whatever is now claimed." (See page 1117.) The specification does not "clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed." (See Vas-Cath at page 1116.). Consequently, Applicant was not in possession of the instant claimed invention. See University of California v. Eli Lilly and Co. 43 USPQ2d 1398.

Applicant is directed to the Guidelines for the Examination of Patent Applications Under the 35 U.S.C. 112, ¶ 1 "Written Description" Requirement, Federal Register, Vol. 66, No. 4, pages 1099-1111, Friday January 5, 2001.

16. No claim is allowed.

17. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. For example, on page 41,paragraph 0094, the word "muteins" is misspelled. Applicant's cooperation is requested in correcting any errors of which Applicant may become aware in the specification.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michail Belyavskyi whose telephone number is 571/272-0840. The examiner can normally be reached Monday through Friday from 9:00 AM to 5:30 PM. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on 571/272-0841.

The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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